

U.S. Application No. 10/752,642
Supplemental Amendment

JUL 17 2007
PATENT
790001-2042

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the instant application are respectfully requested in view of the following remarks, which place the application into condition for allowance.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-14 are pending in this application. Claims 7-10, 13 and 14 are allowed; claim 4 is objected to; and claims 1-3, 5, 6, 11 and 12 are rejected in the Final Office Action mailed on November 2, 2006. Claims 1, 5, 7 and 9 have been amended previously and in this response. Support for this amendment can be found throughout the specification as originally filed, specifically in Fig. 13 and paragraph [0183] of the application as originally filed. No new matter is added as a result of the claim amendments herein.

II. THE REJECTIONS UNDER 35 U.S.C. § 102(e)

In the Office Action, claims 1, 2, 3, 5, 6, 11 and 12 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent Application Publication No. 2002/0167091 to Iwasaki et al. ("Iwasaki"). The rejections are traversed for at least the following reasons.

Amended claim 1 recites, *inter alia*:

"... at least two wiring layers, each formed in a wiring groove formed in a corresponding insulating film; and
a via contact embedded in a via hole formed in an insulating film formed between the at least two layers and made of a metal wiring material which is the same as that of the at least two wiring layers..." (emphasis added)

Iwasaki does not teach or disclose the above identified feature of claim 1. Specifically, Iwasaki does not teach or suggest at least two wiring layers, each formed in a wiring groove formed in a corresponding insulating film; and a via contact embedded in a via hole formed in an insulating film formed between the at least two layers and made of a metal wiring material which is the same as that of the at least two wiring layers, as recited in claim 1.

For at least the foregoing reasons, Applicants respectfully submit that independent claim 1 patentably distinguishes over Iwasaki and is therefore allowable. Independent claim 5 and 11 are similar or somewhat similar in scope to claim 1 and are therefore allowable for similar reasons.

Specifically, the combination of the semiconductor device as in claim 1, 5 or 11 with the recitation of wherein the metal wiring material is Cu and the additive is Sn, Rh, Zn, Al, Ru, Cr,

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Pd, In, Mg, Co, Zr, Ti, Ag, Ir, Ni, Ge, Nb, B, or Hf as provided in claims 2, 6 and 12 is not taught or suggested by Iwasaki.

Additionally, the combination of the semiconductor device as in claim 1 with the recitation of wherein the metal wiring material is Al and the additive is Cu or Si as provided in claim 3 is not taught or suggested by Iwasaki.

Additionally, the combination of the semiconductor device as in claim 1 with the recitation of wherein the metal wiring material is Ag and the additive is Cu as provided in claim 4 is not taught or suggested by Iwasaki.

Therefore, claims 2-4, 6 and 12 are patentable for at least the above-identified reasons.

CONCLUSION

In view of the foregoing amendments and remarks, all of the claims in this application are in condition for allowance and Applicants respectfully request early passage to issue of the present application.

In the event the Examiner disagrees with any of the statements appearing above with respect to the disclosures in the cited references, it is respectfully requested that the Examiner specifically indicate the portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicants

By:



Grace L. Pan
Reg. No. 39,440

Thomas J. Kowalski
Reg. No. 32,147

Telephone: (212) 588-0800
Facsimile: (212) 588-0500